BRUHAT BANGALORE MAHANAGARA PALIKE

AME OF WORK:- Modified Estimate for Improvements to Roads and Drains at eshabanndunagara and Surrounding areas in Ward No. 09, (Vidyaranyapura).

								Estimation Cost.Rs	**4091932.00**
l No	**Description of work**	**Unit**	**Mesurement**				**Qty**	**Rate**	**Amount**
			No.	**L**	**B**	**D**			
1	**Removing and refixing** stone slabs of drains and pointing in CM (1:3) (P.No-27,I No-5.33)								
		Sqm							
			Not Exeucted					**116.87**	
2	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils, as per drawing and technical specifications, includlng setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. (PWD SR 21-22 Vol -I Pg No 5 item no 1.4.1)								
	New Drain	**Cum**							
	ChikkaVenkatappa Layout								
	Main Road E/S		1	90.30	1.10	1.00	99.33		
	From 1st Cross to 3rd Cross S/S		1	64.40	1.10	1.00	70.84		
	From 1st Cross to 2nd Cross N/S		1	24.80	1.10	1.00	27.28		
	1st Cross Road W/S		1	94.00	1.10	1.00	103.40		
	1st Cross Road E/S		1	93.10	1.10	1.00	102.41		
	2nd Cross Road W/S		1	88.20	1.10	1.00	97.02		
	For Culvert								
		Cum	1	7.30	2.00	1.20	17.52		
	Total						**517.80**		
	Qty upto 125%						**363.83**	**214.83**	**78161.00**
	Above 125%						**153.98**	**214.58**	**33041.00**
	Basic rate	186.00							
	Area weightage 10%	18.60							
	Sub Total	**204.60**							
	Tender Premium @ +4.88%	**9.98**							
	Grand Total	**214.58**							
3	Providing granite slabs of selected quality roughly dressed having a size of 7.5cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.27,I.No.5.31.1)								
	Covering Slab	**Sqm**							
	ChikkaVenkatappa Layout								
	Main Road E/S		1	39.30		0.90	35.37		

No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	From 1st Cross to 3rd Cross S/S		1	38.00		0.90	34.20		
	From 1st Cross to 2nd Cross N/S		1	15.90		0.90	14.31		
	1st Cross Road W/S		1	63.70		0.90	57.33		
	1st Cross Road E/S		1	69.90		0.90	62.91		
	2nd Cross Road W/S		1	60.30		0.90	54.27		
	Total						**258.39**		
	Qty upto 125%						**155.93**	**779.10**	**121481.00**
	Above 125%						**102.47**	**778.21**	**79739.00**
	Basic rate	700.00							
	Area weightage 6%	42.00							
	Sub Total	**742.00**							
	Tender Premium @ +4.88%	**36.21**							
	Grand Total	**778.21**							
4	Providing and laying in position plain cement concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (PWD SR 2021-2022 Vol -I Pg 15 item no 2.1.3)								
	For Drain	**Cum**							
	ChikkaVenkatappa Layout								
	Main Road E/S		1	90.30	1.10	0.15	14.90		
	From 1st Cross to 3rd Cross S/S		1	64.40	1.10	0.15	10.63		
	From 1st Cross to 2nd Cross N/S		1	24.80	1.10	0.15	4.09		
	1st Cross Road W/S		1	94.00	1.10	0.15	15.51		
	1st Cross Road E/S		1	93.10	1.10	0.15	15.36		
	2nd Cross Road W/S		1	88.20	1.10	0.15	14.55		
	For Culvert								
			1	7.30	2.00	0.15	2.19		
	Total						**77.23**		
	Qty upto 125%						**70.91**	**6643.56**	**471111.00**
	Above 125%						**6.32**	**6635.97**	**41936.00**
	Basic rate	5752.00							
	Area weightage 10%	575.20							
	Sub Total	**6327.20**							
	Tender Premium @ +4.88%	**308.77**							
	Grand Total	**6635.97**							

No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
5	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) (PWD SR 21-22 Vol -I Pg 17 item no 2.4.2)								
	Drain	**Cum**							
	Bottom Raft								
	ChikkaVenkatappa Layout								
	Main Road E/S		1	90.30	0.90	0.15	12.19		
	From 1st Cross to 3rd		1	64.40	0.90	0.15	8.69		
	From 1st Cross to 2nd		1	24.80	0.90	0.15	3.35		
	1st Cross Road W/S		1	94.00	0.90	0.15	12.69		
	1st Cross Road E/S		1	93.10	0.90	0.15	12.57		
	2nd Cross Road W/S		1	88.20	0.90	0.15	11.91		
	Side Wall								
	ChikkaVenkatappa								
	Main Road E/S		2	90.30	0.15	0.55	14.90		
	From 1st Cross to 3rd		2	64.40	0.15	0.55	10.63		
	From 1st Cross to 2nd		2	24.80	0.15	0.55	4.09		
	1st Cross Road W/S		2	94.00	0.15	0.55	15.51		
	1st Cross Road E/S		2	93.10	0.15	0.60	16.76		
	2nd Cross Road W/S		2	88.20	0.15	0.60	15.88		
					Sub Total		**139.16**		
	Culvert								
	Bottom Raft								
			1	7.30	1.80	0.20	2.63		
	Side Wall								
			2	7.30	0.25	0.60	2.19		
					Sub Total		**4.82**		
	Total						**143.98**		
	Qty upto 125%						**139.61**	**7586.96**	**1059234.00**
	Above 125%						**4.37**	**7578.29**	**33079.00**
	Basic rate	6256.00							
	Add 5% for Shuttering	312.80							
		6568.80							

No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Area weightage 10%	656.88							
	Sub Total	**7225.68**							
	Tender Premium @ +4.88%	**352.61**							
	Grand Total	**7578.29**							
	Supplying, Fitting and Placing un-coated T.M.T bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications. MORTH Specification NO.1600&2200 (PWD SR 21-22 Vol -III Pg 99 item no 13.1)							
	For Drain	Cum					139.16		
		kg	Steel assumed 60Kg/Cum of Concrete				0.05		
		tonne					**7.17**		
	For Culvert	Cum					4.82		
		kg	Steel assumed 90Kg/Cum of Concrete				0.08		
		tonne					**0.39**		
	Total						**7.55**		
	Qty upto 125%						**7.55**	**119345.00**	**901312.00**
	Above 125%						**0.00**	**119208.60**	**0.00**
	Basic rate	103329.00							
	Area weightage 10%	10332.90							
	Sub Total	**113661.90**							
	Tender Premium @ +4.88%	**5546.70**							
	Grand Total	**119208.60**							
	Providing and Fixing pre cast covering **Slab** made out of CC 1:2:4 with **100mm thick** and Finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., copmplete. (Data Rate)								
	New Drain Cover Slab	**Sqm**							
	ChikkaVenkatappa Layout								
	Main Road E/S		1	51.00	0.75		38.25		
	From 1st Cross to 3rd Cross S/S		1	26.40	0.75		19.80		
	From 1st Cross to 2nd Cross N/S		1	13.70	0.75		10.28		
	1st Cross Road W/S		1	32.10	0.75		24.08		
	1st Cross Road E/S		1	23.20	0.75		17.40		
	2nd Cross Road W/S		1	27.90	0.75		20.93		
			1	100.00	0.75		75.00		
			1	100.00	0.75		75.00		
			1	100.00	0.75		75.00		

	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
			1	60.00	0.75		45.00		
	Total						**400.73**	**2453.85**	**983319.00**
9	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete.As per Engineer incharge								
	Culvert Cover Slab	**Sqm**							
		Sqm	1	7.30	1.80		13.14		
	Total						**13.14**	**5688.90**	**74752.00**
9	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. 1;2;4(The cost of steel reinforcement & formwork to be paid separately) (PWD SR 2021-22 Vol -I Pg 17 item no 2.4.1)								
		Cum							
	ChikkaVenkatappa Layout								
	Main Road E/S		1	90.30	0.30	0.10	2.71		
	From 1st Cross to 3rd Cross S/S		1	64.40	0.30	0.10	1.93		
	From 1st Cross to 2nd Cross N/S		1	24.80	0.30	0.10	0.74		
	1st Cross Road W/S		1	94.00	0.30	0.10	2.82		
	1st Cross Road E/S		1	93.10	0.30	0.10	2.79		
	2nd Cross Road W/S		1	88.20	0.30	0.10	2.65		
							13.64	**7040.88**	**96066.00**
10	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. (PWD SR 2021-22 Vol -II Pg 17 item no 6.33)								
		Sqm							
				Not Exeucted				**1232.39**	
11	**Loading and Unloading of Stone Boulder**/Stone aggregates/ Sand/Kankar/Moorum. (Tipper 14 m3) (PWD SR 2021-22 Vol-III Page No.3, Item No.1.1C)								
	Qty Vide from Item No - 2 * 94%	**Cum**					517.80		
	Total						**517.80**	**81.40**	**42149.00**

No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
2	**Cost of Haulage** Excluding Loading and Unloading Taking output 18 t load and lead 10 km = 180 t.km (PWD SR 2021-22 Vol-III Page No.3, Item No.1.4B)								
	Qty from Item No -11	**t.Km**		517.80	1.28		662.78		
	Total						**662.78**	**115.50**	**76552.00**
								Grand Total	**4091932.00**

Rupees Forty Lakh(s) Ninety One Thousand Nine Hundred Thirty Two Only

CERTIFICATE:

1) The work spot has been inspected and found to be necessary

2) The work spot comes under B.B.M.P

3) The provisions made in the estimate are necessary and minimum

4) The estimate is based on C.S.R of 2018-19, PWD 2021-22, Issue Rates and Data Rates +/- Tender Premium.

Assistant Engineer
Ward No. 09

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

Assistant Executive Engineer
Vidyaranyapura Sub Division

Executive Engineer
Byatarayanapura Division

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ವಿಭಾಗ
ಬೃ.ಬೆ.ಮ.ಪಾ, ಬೆಂಗಳೂರು

Technical Sanction
Accorded For Rs 4091932/-
Head of A/C P3873
CER NO : 207 Dt: 21.07.2022